Practical Week 3&4

In this week's practical session, we will start with a few simple exercises in Python. For some of you, Python might be entirely new, but for most of you probably not. So the aim of this practical session is to bring everybody up to speed with Python.

Your Tasks

1. Start up Python and jupyter notebook.

2. Warm up

Spend 20 minutes or so on the examples provided in the Python Primer in week 3's lectures and try out as many of these examples as possible.

2. A Few Exercises

1. Given the following dictionary:

   ```
   student_grades = {'Adam':'CR', 'Leo':'HD', 'Max':'D', 'Nicole':'CR', 'Oscar':'P'}
   ```

   print all key-value pairs:

   ```
   ('Adam', 'CR')
   ('Leo', 'HD')
   ('Max', 'D')
   ('Nicole', 'CR')
   ('Oscar', 'P')
   ```
2. Given the same dictionary as above, print all keys.
3. Given the same dictionary as above, print all values.
4. Write a Python program that prints the current date and time in the same format as the following example: `2020-08-11 10:38:48`. Note that you have to import the `datetime` module and use the instance method: `date.strftime(format)` for this purpose. Check the Python documentation for details.
5. Given a list of seven fruits: `['Apple', 'Banana', 'Fig', 'Pear', 'Plum', 'Peach', 'Raspberry']`, write Python code that always removes the first fruit, the fifth fruit, and the sixth fruit from such a list and returns the following list: `['Banana', 'Fig', 'Pear', 'Raspberry']`. Note that for the following list: `['Banana', 'Apple', 'Pear', 'Plum', 'Peach', 'Fig', 'Raspberry']`, the result should look as follows: `['Apple', 'Pear', 'Plum', 'Raspberry']`.
6. Open a new editor window and write a Python program that writes the following text into a text file:

   ```
   Hello TECH 1004
   This is our new text file
   ```

```
and this is another line.
Why? Because this is a basic task.
```

If you have problems with these tasks, then please ask your practical supervisor for help.